## THE 29TH INTERNATIONAL CONFERENCE ON ADVANCES IN CRITICAL CARE NEPHROLOGY

Updates in ICU Medicine: Controversies, Challenges and Solutions

# AKI&CRRT 2024



MARCH 12-15, 2024

MANCHESTER GRAND HYATT SAN DIEGO, CALIFORNIA

CRRTONLINE.COM

#### TWENTY NINTH INTERNATIONAL CONFERENCE ON ADVANCES IN CRITICAL CARE NEPHROLOGY

## AKI&CRRT 2024

#### MARCH 12-15, 2024

MANCHESTER GRAND HYATT SAN DIEGO, CALIFORNIA USA

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#### **IMPORTANT CONFERENCE DATES**

Abstract Submission	Now Open
Online Registration	Now Open
Deadline for Receipt of Abstracts (see page 5)	December 12, 2023
Deadline for Early Bird Registration	December 18, 2023
Notification of Abstract Acceptance	January 5, 2024
On-site Registration Fees Begin	February 6, 2024
Hotel Reservation Deadline	Feburary 16, 2024
Pre-Conference Elective CRRT Workshop (see page 4)	March 11 & 12, 2024
Pre-Conference Elective NEXUS Workshop (see page 4)	March 11, 2024
Pre-Conference Elective POCUS Workshop (see page 4)	March 12, 2024
Pre-Conference Elective Critical Care Nephrology Symposium (see page	4) March 12, 2024
Poster Mounting and Viewing	March 12, 2024
Plenary and Standard Workshop Sessions	March 13-15, 2024

#### FACULTY (partial list)

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Alex Zarbock, MD Munster, NR GERMANY

#### GENERAL INFORMATION

Visit our website for the most current program information, abstract submission, online registration and online hotel reservations. www.crrtonline.com

#### CONFERENCE DATES AND LOCATION

The inclusive dates for all scientific sessions of the **TWENTY NINTH INTERNATIONAL AKI & CRRT CONFERENCE** are March 12-15, 2024. The Conference will be held at the Manchester Grand Hyatt, 1 Market Place, San Diego, CA 92101, Tel: (619) 232-1234. Online Reservations are available directly with the hotel by using Hotel Reservations link on the conference website. Group reservations of 5 or more hotel rooms need to contact the conference administration directly at 858-272-1018.

#### **REGISTRATION INFORMATION** (Virtual Option Available)

Please visit our website to register (online registration required, printable form available). All participants must register and pay the appropriate fee. *Fee includes* access to all Plenary Sessions, Standard Workshops, Morning Symposia, Exhibit Area, Welcome Reception & Poster Sessions (Tue.), Exhibit Reception & Poster Sessions (Wed.), CME Accreditation, Conference Syllabus (digital media), two Lunches (Wed. & Thur.), and all conference coffee breaks. Conference Registration Fee *DOES NOT* include Elective Events on Monday or Tuesday. Registration check-in will begin on Monday, March 11, 2024. Poster Viewing will begin on Tuesday evening March 12, 2024. For additional registration times see the program. **See website for Virtual Options.** 

REGISTRATION FEES	Early Bird On or before Dec. 18, 2023	Pre-Registration Dec. 18, 2023 thru Feb. 5, 2024	Registration Feb. 6 thru Mar. 15, 2024
Physicians/Other (MD, PhD, etc.)	\$ 895	\$ 995	\$ 1,050
With Multimedia Package	\$ 1,195	\$ 1,295	\$ 1,350
Nurses/Dieticians/ Pharmacists/Residents*/Fellows*	\$ 615	\$ 725	\$ 770
With Multimedia Package	\$ 915	\$ 1,025	\$ 1,070
Industry	\$ 895	\$ 995	\$ 1,050
With Multimedia Package	\$ 1,195	\$ 1,295	\$ 1,350

<sup>\*</sup>with letter of verification from department head

#### CME CERTIFICATE FEE

\$50

Includes credits for Conference Sessions, CRRT Basics Workshop and POCUS Workshop

#### PRE-CONFERENCE ELECTIVE SYMPOSIUM & WORKSHOP FEES

CRRT Basics/POCUS/Crit. Care Symp Crit. Care with Multimedia Package	330 455	\$ 350 \$ 475	-	375 500
Crit. Care Symp. w/o full conference reg.		\$ 380		405
with Multimedia Package	\$ 485	\$ 505	\$	530
Nexus Pediatric Workshop	\$ 75	\$ 75	\$	75

#### MEET THE EXPERT BREAKFAST SESSIONS

(with registration) \$60

These breakfast sessions (choose from 2 on Wed., Thur. & Fri.) allow participants to meet and interact with internationally renowned experts in an informal setting over breakfast. See pages 12, 16 and 19 for titles and faculty.

#### ONLINE MULTIMEDIA PRESENTATIONS

(with registration) \$300

Free with 3 night conference hotel stay! See website for details.

We will record all *7 PLENARY SESSIONS* and select symposia for post-conference viewing online. Add this package to your registration to review presentations in a state-of-the-art format that includes streaming audio and video, and synchronized slides.

#### PRE-CONFERENCE ELECTIVE EVENTS

#### ELECTIVE CRRT WORKSHOP (see page 3 for fees)

2 Day Workshop!

MON. & TUES., MARCH 11 & 12 (CME Available for fee, limited enrollment)

#### Practice Based Learning in CRRT: The Science and the Art

Monday 1:30pm-6:00pm, Tuesday 8:00am-5:30pm

See full description and program on pages 9 & 10.

(includes PM break Monday and Tuesday breaks & lunch - full CRRT Conference Registration Required)

#### **ELECTIVE NEXUS WORKSHOP**

New Workshop!

(see page 3 for fees)

MONDAY, MARCH 11 (Non-CME, limited enrollment)

#### **Introduction to the NEXUS - Pediatric Collaboratives**

1:00pm-6:15pm

See full description and program on page 9.

(includes breaks and dinner - full CRRT Conference Registration Required)

#### **ELECTIVE POCUS WORKSHOP**

New Workshop!

(see page 3 for fees)

TUESDAY, MARCH 12 (CME Available for fee, limited to 40 participants)

#### Point of Care Ultrasound (POCUS): Science and Practice

Tuesday 8:00am-4:30pm

See full description and program on page 11.

(includes lunch, AM & PM breaks - full CRRT Conference Registration Required)

#### ELECTIVE CRITICAL CARE NEPHROLOGY SYMPOSIUM

(see page 3 for fees)

TUESDAY, MARCH 12 (Non-CME, limited enrollment)

## Innovations in Acute Kidney Injury and Extracorporeal Organ Support

7:55am-5:30pm

See full description and program on page 12. Full conference registration is NOT required to attend.

(includes lunch, AM & PM breaks)

\* A \$30 discount will be given to attendees that also register for the AKI & CRRT Conference. To receive the discount you must sign up for this symposium at the same time you register for the conference.

#### ELECTIVE MEET THE EXPERTS (see page 3 for fees)

These elective breakfast sessions allow participants to meet and interact with internationally renowned experts in an informal setting over breakfast. This is an excellent opportunity to ask questions, learn how these experts manage patients, get guidance for projects and network.

Choose from 2 on Wednesday, Thursday and Friday - 7:00-8:00am. See program for details - starting on page 13.

#### ADDITIONAL OPTIONAL SESSIONS (Non-CME)

These informative sessions are held during breakfast or lunch time periods. Seating is **LIMITED** for these sessions - Selection made during registration.

#### WEDNESDAY MORNING, March 13

7:00-8:00am

#### INDUSTRY BREAKFAST SYMPOSIUM

#### S1 - Waking up to Endotoxemic Septic Shock. What to You Need to be Ready?

Moderators: John Kellum and Debra Foster

Speakers:

Diagnosing ESS in the real world - Danielle Davison, George Washington University

Treating ESS in the real world - Javier Neyra, University of Alabama

Implementing PMX hemoadsorption at the bedside - Johann Chang, (Spectral), Tara

Morgan-Gray (Colorado Springs) Sponsored by: Spectral Medical

#### WEDNESDAY AFTERNOON, March 13

12:30-2:00pm

#### INDUSTRY LUNCH SYMPOSIA

#### 11 - Renal Replacement Therapy Choices: What are the links to long term outcomes?

Advancements in Acute Kidney Injury drive us to seek a deeper understanding of the choices we make and their impact on long-term outcomes. Delve into discussions on renal replacement therapy nomenclature, the intricacies of membrane technology and the critical examination of how modality choice may impact long-term renal recovery. Join us as we decipher these complexities and uncover the links that shape the future of Critical Care Nephrology.

Moderator: Dr. Ron Wald

Nomenclature: What's in a name? Aren't they all the same? - Dr. Thiago Reis

Membranes: What is the difference? What difference do they make? - Dr. Manish Kaushik

Modality and Renal Recovery: Is there a link? - Dr. Ron Wald

Sponsored by: Baxter

#### 12 - New Therapies in Pediatric Acute Kidney Injury

Despite advancements in kidney replacement therapy, little improvement in morbidity and mortality rates of acute kidney injury (AKI) or sepsis-associated AKI (SA-AKI) have occurred over the past few decades. Mortality rates in children with AKI and multi-organ failure requiring continuous kidney replacement therapy (CKRT) continues to remain at ~50%. Additionally, children who survive an AKI episode are at increased risk of chronic kidney disease (CKD). This program will explore the background and clinical data of the selective cytopheretic device in pediatric AKI.

Moderator: Stuart Goldstein

Speakers: Ayse Akcan-Arikan, Rajit Basu, David Askenazi

Sponsored by: SeaStar Medical

#### THURSDAY AFTERNOON, March 14

12:30-2:00pm

#### INDUSTRY LUNCH SYMPOSIA

#### **I3 - Monitoring ECLS in the ICU Patient**

This symposium on Combining Optical Sensors with Truly Regional Citrate Anticoagulation; Rationale, Implementation, and Prospects, will briefly review the principles of Truly regional citrate anticoagulation (True-RCA), combining the use of optical sensors with a discussion of potential future directions. Afterward,

join the panel for a roundtable discussion with audience Q&A. We look forward to a dynamic dialogue with you.

Moderator: David Thompson Speaker: Balazs Szamosfalvi Sponsored by: Fresenius

#### 14 - From Crisis to Control: Extracorporeal Pathogen Removal as a Core Strategy in the Treatment of Sepsis - An ExThera Medical Affairs Update

Moderator: Lui Forni, MD

Presentation Title: TBD - Sania Ilic, MD Presentation Title: TBD - Jonathan Chow, MD

Sponsored by: ExThera Medical

#### ABSTRACT INFORMATION

#### **DEADLINE FOR RECEIPT OF ABSTRACTS: December 12, 2023**

#### Abstract Submission Via Our Website is Required: www.crrtonline.com

#### **GENERAL INFORMATION**

- 1. The abstract must be written in English.
- 2. Deadline: Abstracts MUST BE RECEIVED no later than December 12, 2023.
- 3. Online abstract submissions are required. See website for details: www.crrtonline.com
- 4. Presenting authors must pay the registration fee and attend the meeting. Authors of accepted abstracts are not provided with travel funds.
- All accepted abstracts will be published and distributed electronically in the CRRT Conference Syllabus. Hardcopy syllabus booklets will be available for purchase during the conference. Abstracts and digital posters (if submitted) will also be published online at: www.crrtonline.com
- 6. Notification of acceptance will be mailed by January 5, 2024.
- Selected abstracts will be eligible for digital poster discussions on Tuesday and Wednesday, March 12 & 13 from 5:30-7:00pm. Details will be provided with notification of acceptance.

#### CONTENT OF THE ABSTRACT

- 1. Abstracts are limited to 2500 characters. Please see sample on the conference website.
- 2. Abstract Body: purpose of the study, methods used, summary of the results and conclusion reached.
- 3. Author list is limited to 10.
- 4. References and credits **MUST NOT** be included in the abstract.
- 5. Simple tables, figures and graphs may be included, but avoid the use of special characters.
- 6. Formulas should be avoided.
- 7. Use standard abbreviations in parentheses after the full word appears the first time.
- Please indicate the subject category your abstract most closely represents:
   a) Epidemiology and Outcomes from AKI, b) Research in AKI (Basic, translational, clinical including clinical trials), c) RRT Technique Characteristics, d) RRT Applications and Targeted Interventions, e) New Technology, f) RRT Research, g) Nursing Issues (education, training, care delivery)
- 9. Abstracts will be published as submitted. Proof and edit your submission accordingly.

#### TRAVEL AND REGISTRATION AWARDS

Fellows in an accredited training program, nurses and allied professionals who submit a poster abstract to be presented at the CRRT Conference by December 12 are eligible to apply for Registration and Travel Awards for the conference. Awards will be based on the quality and relevance of the research as judged by the abstract review committee. **Awards will be provided based on availability of funds.** Award recipients are required to be present at their poster session on Tuesday, March 12 and Wednesday, March 13, 2024.

- 1. Registration Awards Conference reg fee. includes plenary sessions and standard workshops.
- 2. Travel Awards Checks for up to a maximum of \$500 will be presented at the time of the conference.
- 3. **Recognition Awards** The top 3 overall and 1 pediatric abstract will be selected.

#### CRITERIA FOR GRANTS AND/OR AWARDS

- 1. Submit a poster abstract (via CRRT web site) and present a poster in the topics covered in the CRRT conference at the Poster Sessions: Tuesday, March 12 and Wednesday, March 13, 2024.
- 2. Fellows must be currently enrolled in an accredited fellowship program in their host country.
- 3. Submit a signed letter (same time as abstract) from their program director verifying their current status in the program. NOTE: Signed letter must be faxed or emailed to CRRT administration office (fax: 1-858-272-7687 or res@crrtonline.com) on the same date as submission of abstract. Abstracts submitted without dated faxed letter will not be accepted for Grants.
- 4. Designate request for financial support on the CRRT website abstract application form.
- 5. Fellows must attend an offered workshop.

#### SUBMISSION

- Notification of acceptance will be mailed by January 5, 2024 with additional information regarding poster dimensions, digital file submission and presentation of your poster.
- 2. For additional information or if you are unable to complete an online submission contact:

RES Seminars Phone: 858-272-1018 Website: crrtonline.com

4425 Cass Street, Suite A Fax: 858-272-7687 San Diego, CA 92109 USA Email: crrt@res-inc.com

#### SOCIAL ACTIVITIES (Non-CME)

**Welcome Reception and Poster Sessions** Tuesday, March 12, 2024 5:30-7:30pm All attendees are invited to review the CRRT poster presentations including fellows in training and meet the presenters and faculty. This is a great opportunity to pick-up credentials, register on-site, organize your workshops and prepare for the upcoming CRRT meeting. Light appetizers & refreshments will be served.

**Exhibit Reception and Poster Session** Wednesday, March 13, 2024 6:00-8:00pm Meet and interact with CRRT poster presenters while you review the latest in equipment and products. This is a great opportunity to network and meet your colleagues. Light appetizers & refreshments will be served.

#### **CME INFORMATION**

#### LEARNER OBJECTIVES

The CRRT conference provides a comprehensive review of advances in clinical care, research and technology in critical care medicine with a focus on the kidney and renal support techniques. The conference is designed to facilitate interdisciplinary interactions among caregivers involved in the management of patients in intensive care units. Physicians, nurses, pharmacists, nutritionists and other allied personnel from industry have opportunities to learn from each other. The conference utilizes a combination of invited lectures; case based small group workshops, debates, hands on interactive and simulation based workshops. Attendees have an opportunity to interact with the faculty through focused panel discussions and symposia.

At the end of this conference attendees should be able to:

- Describe the recent advances in the pathophysiology and management of critically ill
  patients with a focus on sepsis, multi-organ failure, infections, lung and kidney injury in
  different settings.
- Discuss the best ways to identify, treat and follow up patients with acute kidney injury (AKI) resulting from different causes utilizing biomarkers, imaging and lab studies and applying educational tools to raise awareness of AKI.
- Describe the principles and practice of renal replacement techniques including CRRT, IHD and plasma exchange and demonstrate how to setup and use these techniques for managing critically ill patients.

#### NEEDS ASSESSMENT

Several sources of information were utilized to identify the practice gaps prompting this educational conference. These include literature review of multiple publications in Pubmed, publications from the American Society of Nephrology, International Society of Nephrology, ERA-EDTA, Critical care societies and published KDIGO and European Best Practice and NICE guidelines and feedback from participants and faculty at prior CRRT conferences and discussions with the international organizing committee.

#### TARGET AUDIENCE

The CRRT target audience includes: MD/DOs, NP/PA/Nurses, Dieticians, Industry, Pharmacists, Residents and Fellows. Specialties include: Anesthesiology, Cellular & Molecular Medicine, Critical Care, Emergency Medicine, Family & Preventive Medicine, Geriatrics, and Internal Medicine.

#### **CME INFORMATION**

#### **CME CREDIT**

The following sessions are being reviewed for CME Credit:

MONDAY & TUESDAY, MARCH 11 & 12, 2024

ELECTIVE: Practice Based Learning in CRRT: The Science and the Art - WORKSHOP

TUESDAY, MARCH 12, 2024 ELECTIVE: POCUS WORKSHOP WEDNESDAY, MARCH 13, 2024

MEET THE EXPERT SESSIONS, MORNING SYMPOSIA

SESSION I: PATIENT CHARACTERISTICS

GROUP 1 - WORKSHOPS, GROUP 2 - WORKSHOPS

THURSDAY, MARCH 14, 2024

MEET THE EXPERT SESSIONS, MORNING SYMPOSIA

**GROUP 3 - WORKSHOPS** 

SESSION II: CONTROVERSIES IN CRITICAL CARE NEPHROLOGY

SESSION III: EMERGING CONCEPTS IN AKI AND RRT

FRIDAY, MARCH 15, 2024

MEET THE EXPERT SESSIONS, MORNING SYMPOSIA

SESSION IV: IMPROVING OUTCOMES IN AKI

SESSION V: FUTURE TRENDS IN CRRT AND CRITICAL CARE

#### FACULTY DISCLOSURE

It is our policy to ensure that the content of accredited continuing education and related materials is accurate, balanced, objective, and scientifically justified. Education must be free of the influence or control of ineligible companies, and protect learners from promotion, marketing, and commercial bias. All persons in a position to control the content of accredited education must disclose all financial relationships held with ineligible companies, prior to assuming a role in the activity. Those relationships deemed relevant to the education, are mitigated prior to the activity through one of the following strategies: 1) divesting the financial relationship, 2) altering the individual's control over content, and/or 3) validating the content through independent peer review. Persons who refuse or fail to disclose are disqualified from participating in the activity. Activities are evaluated by participants and peer reviewers to determine if the content was free of bias and met acceptable scientific standards. This information is considered in future activity planning.

#### CULTURAL AND LINGUISTIC COMPETENCY

This activity is in compliance with California Assembly Bill 1195 which requires continuing medical education activities with patient care components to include curriculum in the subjects of cultural and linguistic competency. Cultural competency is defined as a set of integrated attitudes, knowledge, and skills that enables health care professionals or organizations to care effectively for patients from diverse cultures, groups, and communities. Linguistic competency is defined as the ability of a physician or surgeon to provide patients who do not speak English or who have limited ability to speak English, direct communication in the patient's primary language. Cultural and linguistic competency was incorporated into the planning of this activity

#### **CANCELLATION POLICY**

If your registration must be cancelled, your fee, less \$100 U.S. for administrative costs, will be refunded upon your written request. No refunds will be made after **March 7, 2023**. Allow 6-8 weeks for refund.

#### CONFERENCE OFFICE

RES Seminars, 4425 Cass Street, Suite A

San Diego, CA 92109 USA

#### CONTACT INFO RES / AKI & CRRT 2023

Phone: 858-272-1018
Fax: 858-272-7687
Email: crrt@res-inc.com
Website: www.crrtonline.com

#### **PROGRAM**

#### **MONDAY, MARCH 11**

12:00pm-7:30pm Conference Registration Open

#### PRE-CONFERENCE ELECTIVE WORKSHOP

(Non-CME, see page 3 for elective workshop fees)

#### **NEXUS**

Multiple pediatric critical care nephrology groups have made great strides to innovate, educate, study and focus the global approach to care for critically ill neonates and children. Recognizing that performing or providing innovative, systematic, state-of-the-art care and research is an ongoing process, we are excited to announce the 1st convocation of the "NEXUS" which will integrate faculty across multiple disciplines and stages in their career with industry partners.

#### **MONDAY AFTERNOON, March 11**

1:00-1:15	Introduction to the NEXUS
1:15-2:30	Pediatric Collaboratives - What's New? The Challenges for the Next Chapter?
2:30-3:15	Refreshment & Interactive Session #1 – Networking between/join collaboratives
3:15-4:15	The Next Big Ideas (x4) - Jr. Faculty Led Sessions
4:15-5:15	Peds and Industry: Advancing Care Together
5:15-5:45	Refreshment & Interactive Session #2 – Industry and Peds Partnerships
5:45-6:00	The Missing Link - What Do We Need for the Next Quantum Leap
6:00-6:15	Sharing of Ideas / Concluding Statements
6:15-7:00	Adjourn
7:00-9:00	Dinner

Faculty - David Askenazi, Rajit K. Basu, Kristin Dolan, Katja Gist, Stuart Goldstein, Cara Slagle, Michael Zappitelli

#### PRE-CONFERENCE ELECTIVE WORKSHOP

(CME Available, see page 3 for elective workshop fees)

#### Practice Based Learning in CRRT: The Science and the Art

This workshop is designed to provide participants with the knowledge and understanding for the effective utilization of CRRT to manage critically ill patients. Session 1 on Monday focuses on the fundamentals of CRRT including the components, operational characteristics and characteristics, solute and fluid management and monitoring. Session 2 on Tuesday will utilize case-based discussions and interactive sessions to illustrate the underlying concepts for application of CRRT in different situations. Delegates will participate in group exercises to apply their learning for the management of complex cases. At the end of this workshop participants will have an improved understanding of how to utilize CRRT for optimizing renal support. A quiz will be administered pre-and post-course for assessment.

#### **Learning Objectives:**

- Describe the underlying concepts and review the process of decision making for prescribing and delivering CRRT
- Learn machine set-up for different modalities, alarm conditions, troubleshooting, monitoring and charting
- Utilize the tools provided to manage complex cases

Co-Chairs: Ashita Tolwani, MD and Jorge Cerda, MD

#### **MONDAY AFTERNOON, March 11 - SESSION 1**

#### 1:30pm-6:00pm CRRT PRINCIPLES

1:50pm-6:0	opin CKKI PKINCIPLES
1:30-1:45pm	Opening Remarks – Ashita Tolwani, Jorge Cerda
1:45-2:00	Introduction to CRRT Master Class – Ashita Tolwani
2:00-2:30	Patient Selection, Modality, and Dose - Jorge Cerda
2:30-3:15	The ABC of the CRRT Prescription – Ashita Tolwani
3:15-3:45	Access, Membrane, Circuit – Manish Kaushik
3:45-4:15	Solutions and Fluid Balance – Javier Neyra
4:15-4:30	Coffee Break
4:30-4:50	Drug Dosing and Adjustments – Linda Awdishu
4:50-5:10	Nutritional Support During CRRT – Michael Connor
5:10-6:00	$\textbf{Dysnatremias and Acid Base Disorders} - Lenar \ Yessayan$
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6:00pm Adjourn (Resume Tuesday Morning)

#### **TUESDAY, MARCH 12**

#### Practice Based Learning in CRRT: The Science and the Art

Continued from Monday afternoon

#### TUESDAY, March 12

#### **SESSION 2**

8:00am-9:35am **IMPLEMENTING CRRT** 

8:00-8:20 **Initiation and Discontinuation** – Manish Kaushik

8:20-8:40 Integrating Multidisciplinary Support Team for CRRT Delivery – Linda Awdishu

8:40-9:00 Paper to Digital, e-Prescribing and Charting for CRRT During

AKI in the ICU – Ian Baldwin

9:00-9:20 **Developing Quality Measures for CRRT Delivery** – David Askenazi

9:20-9:35 Introduction to Workshops – Ashita Towani

9:35-9:50 Coffee Break

#### **SESSION 3**

#### 9:50am-12:15pm WORKSHOPS - Breakout Sessions

Rotating at 45 minute intervals: 9:50-10:35am; 10:40-11:20am; 11:25am-12:15pm

Room #1: Knowing your Circuit, Alarms, and Other Tricks

Ian Baldwin, Katrina Eggleston, Pam Carroll, Katie Plomaritas

Room #2: The When, How, and Why of CRRT? - Jorge Cerda and Rajit Basu

Room #3: Citrate Lab and Other Anticoagulation Alternatives: Concepts to Build Your Protocol Lenar Yessayan and Michael Connor

12:15-1:00pm Lunch Hosted by Conference for Workshop Participants

#### **SESSION 4**

#### 1:00pm-3:00pm WORKSHOPS - Breakout Sessions

Rotating at 35 minute intervals: 1:00-1:35pm, 1:40-2:15pm, 2:25-3:00pm

Room #1: Connectology with Hybrid Systems: ECMO, Apheresis, ECCOR

Keith Wille, Ian Baldwin and Katie Plomaritas

Room #2: Precision Solute Control and Dynamic Dosing with CRRT

Manish Kaushik and Ashita Tolwani

Room #3: POCUS How to Use it for Fluid Management with CRRT

Ron Wald and Javier Neyra

3:00-3:15 Coffee Break

#### **SESSION 5 - NON-CME**

#### 3:15pm-5:30pm INTERACTIVE TRACKS

These sessions will have adult and pediatric tracks to familiarize attendees with the available CRRT machines. Participants will be guided on user inter-faces, learn how to set up for different modalities and adjust and monitor for therapy delivery based on the prescription. Machines connections for combination therapies with ECMO, apheresis and adsorption techniques will be shown. *This Session is Non-CME* 

#### 3:15pm-4:45pm CRRT Equipment Demonstrations Simultaneous - Breakout Sessions

(select one)

Room #1: Baxter PRISMAX

Ashita Tolwani, Michael Connor, Katrina Eggleston and Pam Carroll

Room #2: Fresenius NxStage / MultiFiltrate Pro

Lenar Yessayan, MD and Balazs Szamosfalvi, MD (multiFiltrate Pro) and Matthew Trainor, Anne Pontillo (NxStage)

Room #3: Pediatric Systems Carpediem – David Askenazi and Katie Plomaritas

#### 4:45pm-5:30pm CRRT MASTER CLASS

In this session participants will be allocated to teams and given a case scenario for which they have to determine an appropriate prescription for CRRT and program the machine to deliver the therapy.

5:30 Adjourn

7:00am-7:00pm

Conference Registration Open

#### PRE-CONFERENCE POCUS WORKSHOP (CME Available w/ fee))

(limited to 40 participants, see page 3 for elective workshop fees)

#### Point of Care Ultrasound (POCUS): Science and Practice

This course is designed for nephrology and critical care providers to learn the basics of Point-Of-Care Ultrasound with a specific focus on frequent pathologies found in acutely ill patients. This workshop will include brief didactic sessions and hands-on sessions. At the end of this workshop, the trainees will have basic knowledge about indications for POCUS, normal/abnormal findings, and how this can be integrated in the evaluation of the patients. The aim is to provide the introductory practical skills necessary to continue Pre-Conference Elective
Pre-Conference Elective
2024!
New in 2024!
POCUS Workshop
POCUS March 12
S: their training autonomously. A quiz will be administered pre-and post- course for assessment.

Faculty: W. Beaubien-Souligny; K. Kashani; A. Shaw, R. Wald; J. Deschamps; V. Niyyar

#### **Learning Objectives:**

The core focus on this course is as follows:

#### 1. Cardiac:

- A. Qualitative assessment of chamber size and systolic function;
- B. Identification of severe valvulopathy;
- C. Assessment of pericardial fluid and tamponade physiology

#### 2. Thoracic:

- A. Qualitative assessment of pleural effusion size and characteristics;
- B. Identification of pneumothorax;
- C. Assessment of alveolar consolidation and interstitium

#### 3. Abdominal:

- A. Identification of kidney and bladder and assessment of kidney size and echogenicity, and evaluation of urinary obstruction;
- B. Identification of intraperitoneal fluid;
- C. Qualitative assessment of abdominal aorta size

#### 4. Vascular and Vascular Access:

- A. Patency and caliber of main veins for catheter placement;
- B. Identifying the presence of a thrombus;
- C. Basic examination of an arteriovenous fistula/graft

#### 5. Hemodynamic and Fluid Evaluation:

- A. Inferior vena cava visualization and assessment;
- B. Venous Doppler assessment;
- C. Estimating stroke volume / cardiac output

Schedule - Participants will be allocated into groups of 4 and will rotate through each of 5 stations to review the principles of image identification and interpretation and get hands-on experience with the ultrasound probes.

#### 8:00-8:20am Welcome and Pre-quiz

- Introduction to Basics of Lung Ultrasound 8:20-8:45
- 8:45-9:15 Lungs: Hands-on (group 1) / Image Review Session (group 2)
- 9:15-9:45 Lung Part 2 (group switch)
- 9:45-10:00 Coffee Break
- 10:00-10:20 Introduction to Basic Echocardiography
- 10:20-10:50 **Heart: Hands-on** (group 1) / **Image Review Session** (group 2)
- 10:50-11:10 **Heart Part 2** (group switch)
- 11:10-12:30 Vascular Ultrasound and Vascular Access
- 12:30-1:15 Lunch Hosted by Conference for Workshop Participants
- 1:15-1:35 Introduction to Abdominal and Renal Ultrasound
- 1:35-2:05 **Abdomen: Hands-on** (group 1) / **Image Review Session** (group 2)
- 2:05-2:35 Abdomen Part 2 (group switch)
- 2:35-2:50 Coffee Break
- 2:50-3:10 Introduction to Fluid Status Assessment: Putting it all together
- Fluid Assessment: Hands-on (group 1) / Image Review Session (group 2) 3:10-3:40
- 3:40-4:10 Fluid assessment 2 (group switch)
- 4:10-4:30 Post-quiz and Conclusion
- 4:30 Adjourn

5:30-7:30pm Tuesday Evening Reception & Poster Review - For All Conference Attendees

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#### **TUESDAY, MARCH 12**

7:00am-7:00pm Conference Registration Open

#### PRE-CONFERENCE CRITICAL CARE SYMPOSIUM (Non CME)

(see page 3 for elective symposium and workshop fees)

## Innovations in Acute Kidney Injury and Extracorporeal Organ Support

CRRT Conference registration is NOT required for this elective symposium. See page 4 for details.

CKKI C	Conference registration is <b>NOT</b> required for this elective symposium. <b>See page 4 for details.</b>
7:55 am	Opening Remarks - Ravindra Mehta, MD
PLENARY 1	The Discovery Pipeline: Molecules, Mechanisms and Targets Co-Chairs: Alex Zarbock and Prabhleen Singh
8:00-8:20 8:20-8:40 8:40-9:00 9:00-9:20 9:20-9:40	Developing a Precision Approach to Sepsis and Sepsis-Associated AKI – Robert Star Molecular Endotypes of Sepsis and AKI – John Kellum  Tubular Transporters: Targets for AKI? – Volker Vallon  Sex as a Biological Variable for AKI – Danielle Soranno  Role of the CD40-Ligand Pathway in Tissue Injury of
0.40.40.00	Native and Transplanted Kidney – Vincenzo Cantaluppi
9:40-10:00	Discussion
10:00-10:15	Coffee Break
PLENARY 2	Bench to Bedside: Translating Discoveries to Clinical Care Co-Chairs: Danielle Soranno and Vincenzo Cantaluppi
10:15-10:35	The Biphasic Effect of Angiotensin II on AKI – Luis Juncos
10:35-10:55	Mitophagy as a Therapeutic Target in AKI – John Prowle
10:55-11:15	Complementary Role of Kidney Biomarkers and Transcriptomic Endotyping in Sepsis Associated AKI – Christian Nusshag
11:15-11:35	Kidney Microphysiological Models for Nephrotoxicity Assessment – Sejoong Kim
11:35-11:55	Human Kidney Precision Medicine Project (KPMP) – Jonathan Himmelfarb
11:55-12:15	Discussion
12:15-1:15pm	Lunch Hosted by Conference
PLENARY 3	Emerging Strategies for AKI Studies Co-Chairs: Kathleen Liu and Matthieu LeGrand
PLENARY 3	
	Co-Chairs: Kathleen Liu and Matthieu LeGrand
1:15-1:35	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein
1:15-1:35 1:35-1:55	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein  Theranostics: Biomarker Guided Interventions – Alex Zarbock
1:15-1:35 1:35-1:55 1:55-2:15	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein  Theranostics: Biomarker Guided Interventions – Alex Zarbock  Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw
1:15-1:35 1:35-1:55 1:55-2:15 2:15-2:35	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein  Theranostics: Biomarker Guided Interventions – Alex Zarbock  Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw  Platform Trials for AKI: What Would it Take? – Derek Angus
1:15-1:35 1:35-1:55 1:55-2:15 2:15-2:35 2:35-2:55	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein  Theranostics: Biomarker Guided Interventions – Alex Zarbock  Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw  Platform Trials for AKI: What Would it Take? – Derek Angus  Surrogate Endpoints for Regulatory Approval: What's Needed? – Bhupinder Singh
1:15-1:35 1:35-1:55 1:55-2:15 2:15-2:35 2:35-2:55 2:55-3:15	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein  Theranostics: Biomarker Guided Interventions – Alex Zarbock  Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw  Platform Trials for AKI: What Would it Take? – Derek Angus  Surrogate Endpoints for Regulatory Approval: What's Needed? – Bhupinder Singh  Discussion
1:15-1:35 1:35-1:55 1:55-2:15 2:15-2:35 2:35-2:55 2:35-2:55 3:15-3:30	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein Theranostics: Biomarker Guided Interventions – Alex Zarbock Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw Platform Trials for AKI: What Would it Take? – Derek Angus Surrogate Endpoints for Regulatory Approval: What's Needed? – Bhupinder Singh Discussion  Coffee Break  Evolving Paradigms: Lessons from Ongoing Trials Co-Chairs: Marlies Ostermann and Ron Wald
1:15-1:35 1:35-1:55 1:55-2:15 2:15-2:35 2:35-2:55 2:55-3:15 3:15-3:30 PLENARY 4	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein Theranostics: Biomarker Guided Interventions – Alex Zarbock Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw Platform Trials for AKI: What Would it Take? – Derek Angus Surrogate Endpoints for Regulatory Approval: What's Needed? – Bhupinder Singh Discussion  Coffee Break  Evolving Paradigms: Lessons from Ongoing Trials Co-Chairs: Marlies Ostermann and Ron Wald  One Size Does Not Fit All: The Role of Phenotyping – Jean-Louis Vincent
1:15-1:35 1:35-1:55 1:35-2:15 2:15-2:35 2:35-2:55 2:35-2:55 3:15-3:30 PLENARY 4	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein Theranostics: Biomarker Guided Interventions – Alex Zarbock Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw Platform Trials for AKI: What Would it Take? – Derek Angus Surrogate Endpoints for Regulatory Approval: What's Needed? – Bhupinder Singh Discussion  Coffee Break  Evolving Paradigms: Lessons from Ongoing Trials Co-Chairs: Marlies Ostermann and Ron Wald
1:15-1:35 1:35-1:55 1:55-2:15 2:15-2:35 2:35-2:55 2:35-2:55 3:15-3:30 PLENARY 4 3:30-3:50 3:50-4:10	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein Theranostics: Biomarker Guided Interventions – Alex Zarbock Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw Platform Trials for AKI: What Would it Take? – Derek Angus Surrogate Endpoints for Regulatory Approval: What's Needed? – Bhupinder Singh Discussion  Coffee Break  Evolving Paradigms: Lessons from Ongoing Trials Co-Chairs: Marlies Ostermann and Ron Wald  One Size Does Not Fit All: The Role of Phenotyping – Jean-Louis Vincent Reappraising MAKE Performance in AKI Trials: What do We Know? – Ravindra Mehta
1:15-1:35 1:35-1:55 1:55-2:15 2:15-2:35 2:35-2:55 2:35-2:55 3:15-3:30 PLENARY 4 3:30-3:50 3:50-4:10 4:10-4:30	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein Theranostics: Biomarker Guided Interventions – Alex Zarbock Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw Platform Trials for AKI: What Would it Take? – Derek Angus Surrogate Endpoints for Regulatory Approval: What's Needed? – Bhupinder Singh Discussion  Coffee Break  Evolving Paradigms: Lessons from Ongoing Trials Co-Chairs: Marlies Ostermann and Ron Wald  One Size Does Not Fit All: The Role of Phenotyping – Jean-Louis Vincent Reappraising MAKE Performance in AKI Trials: What do We Know? – Ravindra Mehta Heterogeneity of Treatment Effect – Derek Angus Overcoming Barriers in the Design and Implementation of Clinical Trials for AKI
1:15-1:35 1:35-1:55 1:55-2:15 2:15-2:35 2:35-2:55 2:55-3:15 3:15-3:30 PLENARY 4 3:30-3:50 3:50-4:10 4:10-4:30 4:30-4:50	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein Theranostics: Biomarker Guided Interventions – Alex Zarbock Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw Platform Trials for AKI: What Would it Take? – Derek Angus Surrogate Endpoints for Regulatory Approval: What's Needed? – Bhupinder Singh Discussion  Coffee Break  Evolving Paradigms: Lessons from Ongoing Trials Co-Chairs: Marlies Ostermann and Ron Wald  One Size Does Not Fit All: The Role of Phenotyping – Jean-Louis Vincent Reappraising MAKE Performance in AKI Trials: What do We Know? – Ravindra Mehta Heterogeneity of Treatment Effect – Derek Angus Overcoming Barriers in the Design and Implementation of Clinical Trials for AKI Matthieu Legrand
1:15-1:35 1:35-1:55 1:55-2:15 2:15-2:35 2:35-2:55 2:35-2:55 3:15-3:30 PLENARY 4 3:30-3:50 3:50-4:10 4:10-4:30 4:30-4:50 4:50-5:10	Co-Chairs: Kathleen Liu and Matthieu LeGrand  Dynamic Kidney Function Monitoring – Stuart Goldstein Theranostics: Biomarker Guided Interventions – Alex Zarbock Predictive Analytics and Simulations for Trial Design and Implementation – Andrew Shaw Platform Trials for AKI: What Would it Take? – Derek Angus Surrogate Endpoints for Regulatory Approval: What's Needed? – Bhupinder Singh Discussion  Coffee Break  Evolving Paradigms: Lessons from Ongoing Trials Co-Chairs: Marlies Ostermann and Ron Wald  One Size Does Not Fit All: The Role of Phenotyping – Jean-Louis Vincent Reappraising MAKE Performance in AKI Trials: What do We Know? – Ravindra Mehta Heterogeneity of Treatment Effect – Derek Angus Overcoming Barriers in the Design and Implementation of Clinical Trials for AKI Matthieu Legrand Implementing Device Trials: What does it Require? – John Kellum

#### WEDNESDAY MORNING, MARCH 13

7:00am-7:00pm Conference Registration Open

7:00-8:00am MEET THE EXPERT - Breakfast Sessions (CME Available)

(elective sessions, choose one, see pg. 4 for fees/details)

Session 1 (ME1) - How do I Manage the Patient with Septic AKI

Derek Angus and Jean-Louis Vincent

Session 2 (ME2) - How do I Dose Volume during CRRT?

Claudio Ronco and Ashita Tolwani

MORNING SYMPOSIA - (CME Available for A and B) 7:00-8:00am

(Seating is LIMITED, selection made during registration, coffee served)

Symposium A - Plasma Exchange in Critically Ill Patients: Who, When and How

Akash Deep and Ian Baldwin (Moderators)

Vedran Premuzic and Dana Fuhrman (Discussants)

Plasma exchange (PE) is increasingly utilized in the ICU with CRRT and other extracorporeal techniques. This symposium will describe the best approaches for applying PE in critically ill patients and explore merging opportunities for managing patients with hybrid therapies

#### Symposium B - Deresuscitation in the ICU: How to use Diuretics,

#### **Ultrafiltration and Dialysis**

Data - John Prowle

Kat Gist and Matthew Legrand (Moderators)

Patrick Murray, Amir Kazory and Raghavan Murugan (Discussants)

Fluid accumulation and fluid overload are common features of critical illness. Regardless of the cause fluid removal is an integral component of management however can be difficult. This symposium will discuss approaches to restore fluid balance with different techniques.

Diuretic Strategies in Patients Who are Resistant to Loop Diuretics – Patrick Murray Ultrafiltration and Diuretic Therapy in Acute Heart Failure – Amir Kazory Fluid Removal with CRRT: How Much and How Fast? - Raghavan Murugan

**S1 Additional Morning Session Offered** (*Non-CME*) see page 5 for details

#### SESSION I: PATIENT CHARACTERISTICS (CME Available)

8:20-10:30am	Plenary 1 - MINI-SYMPOSIA Organ Dysfunction in the Critically Ill Patient: Emerging Concepts	9:30-9:45	Early Multi-modal Vasopressors in Critical Care – Is That a Thing? Ashish Khanna
Co-Chairs:	Neesh Pannu and Michael Joannidis	9:45-10:00	The Forgotten (Right) Ventricle in
8:20-8:30	<b>Opening Remarks</b> Ravindra L Mehta	10:00-10:30	Critical Care Medicine Andrew Shaw SPECIAL LECTURE
8:30-8:45	Hidden in Plain Sight; Chloride in Acute Heart Failure Amir Kazory	10.00-10.30	Greening Critical Care: Can We Do It?
8:45-9:00	What's New in Organ Crosstalk Kathleen Liu		Yes: Jean-Louis Vincent Maybe: Marlies Ostermann
9:00-9:15	Sepsis in 2024: What's Next? Derek Angus		No: Derek Angus  Moderator: Claudio Ronco
9:15-9:30	Trajectories of Critical Illness – Defining Endotypes from Routine	10:30-11:00	Coffee Break / Faculty Picture

#### WEDNESDAY MORNING, MARCH 13

#### STANDARD WORKSHOPS - GROUP 1 (CME Available for All)

Open to all participants - applicable to physicians, nurses and allied personnel

Codes: C= Core workshop, I = Intermediate, A = Advanced, N= Nurses, AP = Nurses & Allied Personnel These Standard Workshops are designed for smaller groups and allow for more interaction between presenters and attendees. Ample time is available for Q&A.

#### Workshop Tracks

A: Biomarkers; B: CRRT Technique; C: Critical Care Topics; D: Organ Support

#### 11:00am-12:30pm GROUP 1 - SIMULTANEOUS STANDARD WORKSHOPS (choose one)

## A01 Enhancing Communication in the Workplace: Conversations in Clinical Encounters (C,N,AP) This experiential workshop is designed to support patient care by promoting curiosity, listening and perspective taking skills and will include ways to achieve competence in responding mindfully to stressful and demanding situations in patient encounters. Along with brief interactive didactics, we will use medical improv, reflective and experiential exercises to enhance skills for patient interactions. (G. Mehta, JM Maury, Ostermann) Limited to 30 participants

#### B02 Citrate Anticoagulation for CRRT: How to Use it? (C,N,AP)

Regional citrate anticoagulation (RCA) is increasingly utilized for CRRT. Advances in technology have enabled automated citrate anticoagulation. However, concerns remain about its ease of use and application in patients with liver failure and reduced tissue perfusion. This workshop will discuss the best approaches for utilizing RCA for CRRT. (*Tolwani, Joannidis, Ricci*)

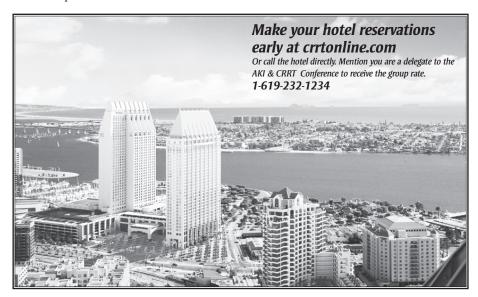
### C03 Focus on POCUS: Assessment of Fluid Responsiveness, Hemodynamic Monitoring and Targets (C,N)

Determining which patient needs fluids, what type, when and how much will be addressed in this workshop which will cover the principles and strategies for volume assessment with point of care ultrasound and hemodynamic monitoring in critically ill patients. (Fuhrman, Souligny, Deschamps)

#### D04 Managing Patients with Combined Kidney and Liver Failure (C,N,AP)

Patients with combined liver and kidney failure are difficult to manage. This workshop will discuss the pathophysiology and illustrate best approaches for differential diagnosis and management of these patients. (Nadim, Deep, Juncos)

#### 12:30-2:00pm Lunch



#### WEDNESDAY AFTERNOON, MARCH 13

12:30-2:00pm **LUNCH SYMPOSIA** - (*Non-CME*)

(Seating is LIMITED, selection made during registration, lunch provided by conference. Please note, these are the only lunch options provided on Wednesday.

#### W1 - Lost in Translation: Communication issues in Critical Care

Despite our best intentions, conversations with caregivers and patients and their surrogates often don't go as planned. Strategies for effective communication need to recognize complexities to how families will perceive their interactions with the healthcare team. This symposium will review the evidence for approaches to improve communication when patients are often incapacitated, emotions run high and our unconscious bias is in play.

Moderators: Jorge Cerda and Raj Basu

Navigating Conflict or Mis-alignment of Expectations – Sean Bagshaw Difficult Decisions with Family and Caregivers – Dana Fuhrman The Case for Compassion – Gita Mehta

#### W2 - Persistent Renal Vulnerability after AKI Recovery: Do Biomarkers Have a Role?

Current paradigms of kidney functional recovery from AKI are based on alterations in serum creatinine and urine output and are often dissociated with the underlying structural damage that may persist and increase the subclinical predisposition to new renal damage and subsequent progression to CKD. The availability of several biomarkers of kidney function and damage provides new approaches to evaluate patients post AKI and target appropriate interventions. This symposium will discuss the role of biomarkers post AKI to enhance patient management.

Moderators: Patrick Murray and Michael Zappitelli

Assessment of Kidney Function During and After AKI – John Prowle

Marrying the FST and Damage Markers to Assess Subclinical AKD – Jay Koyner

Role of Penenkephalin in Assessing Recovery from AKI and AKI-D – Christian Nusshag

- I1 Additional Lunch Session Offered (Non-CME) see page 5 for details
- 12 Additional Lunch Session Offered (Non-CME) see page 5 for details



#### WEDNESDAY AFTERNOON, MARCH 13

#### STANDARD WORKSHOPS - GROUP 2 (CME Available)

#### 2:00-3:30pm GROUP 2 - SIMULTANEOUS STANDARD WORKSHOPS (choose one)

#### A05 Enhancing Communication in the Workplace: Addressing Conflict and Uncertainty

This workshop will share evidence-based communication tools useful in situations of conflict and decisional uncertainty. We will use clinical scenarios with role-plays to highlight challenges in decisional conversations with patients of diverse ages, cultures, and socio-economic status, and especially on situations of conflict with patients and families regarding treatment. (G Mehta, Kashani, Basu, Fuhrman) Limited to 30 participants

#### B06 Precision Solute Control and Dynamic Dosing with CRRT? (I,N,AP)

CRRT techniques have evolved with availability of new technology to customize dialysis delivery. This interactive case based workshop will discuss how to apply the technology for dose adjustments, monitoring for adequacy, modality selection and transitions in CRRT. (Claure, Kaushik, Prowle)

#### C07 Starting, Transitioning and Stopping RRT for AKI: Science and Art (A)

One of the most vexing issues for clinicians is determining when to initiate RRT in critically ill patients, when and how to transition modalities and when it can be stopped. This workshop will use case studies to explore various approaches and establish the principles for clinical decisions for renal support. (Mehta, Bagshaw, Lumlertgul)

#### D08 Managing Patients with Sepsis: Modifying the Course with (ECOS) (C,N,AP)

Septic patients often require ECOS to allow time for recovery. This workshop covers the rationale and strategies for the practical application of extracorporeal support techniques for sepsis. Case studies will be utilized to delineate different options. (*Pickkers, Reis, Cantaluppi*)

3:30-4:00pm Coffee Break

#### SESSION I: PATIENT CHARACTERISTICS - continued (CME Available)

4:00-6:00pm	Plenary 2 - MINI-SYMPOSIA Acute Kidney Injury (AKI): Pathophysiology	5:15-5:30	Kidney-Ventilator Interactions and Kidney Protective Ventilation Sean Bagshaw
Co-Chairs:	Samira Bell and Luis Juncos	5:30-6:00	ADQI UPDATE
4:00-4:15	AKI in the Neurocritical Unit Zaccaria Ricci	5:30-5:45	ADQI 29: AKI in Liver Cirrhosis Mitra Nadim and Akash Deep
4:15-4:30	AKI After Burn injury	5:45-6:00	ADQI 30: Adsorption-based
	Matthieu Legrand		<b>Extracorporeal Therapies</b>
4:30-4:45	AKI in Renal and Non-renal Solid		Claudio Ronco and Thiago Reis
	Organ Transplantation Vincenzo Cantaluppi	6:00pm	Adjourn
4:45-5:00	AKI in the Context of Invasive	6:00-8:00pm	EXHIBIT RECEPTION AND
	Management of Heart Disease		POSTER SESSION
	Matthew James		
5:00-5:15	Arterial and Venous Blood		
	Pressure in Cardiac Surgery		
	Associated AKI		
	Andrew Shaw		

#### **THURSDAY MORNING, MARCH 14**

7:00am-6:00pm Conference Registration Open

7:00-8:00am MEET THE EXPERT - Breakfast Sessions (CME Available)

(elective sessions, choose one, see pg. 4 for fees/details)

Session 3 (ME3) - How I Use AKI Biomarkers in My Practice

Alex Zarbock and Stuart Goldstein

Session 4 (ME4) - How do I Manage the Oliguric Patient?

Ashish Khanna and Jean Louis Vincent

7:00-8:00am MORNING SYMPOSIA (Non-CME)

(Seating is LIMITED, selection made during registration, coffee served)

Symposium C - Optimization of the CRRT Program to Improve Outcomes

Ashita Tolwani (Moderator)

Although RRT is commonly applies worldwide there are minimal established criteria for monitoring the quality of care delivered. This symposium will describe the characteristics of top-tier CRRT programs and describe strategies and tools to develop Quality Improvement merging data from CRRT devices and clinical information. The importance of policies, procedures, and dashboards will be discussed.

Establishing Quality Metrics for RRT: Do We Need the EMR? - Manish Kaushik

Team Based Management of CRRT: It Takes a Village - Ian Baldwin

Harnessing Multimodal Data Streams to Improve CRRT Delivery - Oleksa Rewa

Symposium D - Onco Nephrology: Practical Considerations in Managing AKI in

**Patients with Cancer** - Patrick Murray and Michael Zapitelli (*Moderators*)

The number of anticancer drugs are increasingly expanding and commonly cause kidney injury. This symposium will discuss how to prevent drug nephrotoxicity, doses of anticancer medicines and manage patients who develop AKI in the setting cancer therapy.

Spectrum of Kidney Disorders with Anticancer Drugs – Mitch Rosner

AKI in Setting of Checkpoint Inhibitors - Marlies Ostermann

Monitoring for Drug Nephrotoxicty - Linda Awdishu

#### STANDARD WORKSHOPS - GROUP 3 (CME Available)

#### 8:15-9:45am GROUP 3 - SIMULTANEOUS STANDARD WORKSHOPS (choose one)

#### A09 Pediatric AKI and RRT: Beyond the Basics (I,N,AP)

This workshop will highlight the epidemiology and best practices for AKI management and CRRT, peritoneal dialysis and tandem therapies application in neonates and children. (*Plomaritas*, *Zappitelli*, *Ricci*)

#### B10 Personalized Fluid Management with CRRT (A)

Achieving fluid balance and maintaining plasma composition is key for effective CRRT. This workshop will use case studies to discuss strategies for fluid management in CRRT to achieve patient driven outcomes for fluid, electrolyte and acid base balance. (Murugan, Mehta, Neyra)

#### C11 Improving Care for Patients After Hospitalization for AKI (A,N, AP)

AKI is a complex disease that requires multidisciplinary interventions however most patients who are hospitalized with an episode of AKI do not have systematic follow up or targeted interventions to improve recovery and mitigate the effects of the disease. This workshop will provide guidance on patient centered approaches to improve the management and outcomes of patients with AKI. (Cerda, Lumlertgul, James)

#### D12 Managing the Heart Failure Patient with Worsening Renal Function (WRF) (A,N)

Patients with advanced heart failure often develop WRF. It is often difficult to determine which patients can be managed with drug therapy vs requiring RRT. This workshop will describe the practical application and results of different methods to treat heart failure and cardio-renal syndrome including ultrafiltration techniques. (*Kazory, Ronco*)

#### **THURSDAY, MARCH 14**

#### SESSION II: CONTROVERSIES IN CRITICAL CARE NEPHROLOGY (CME Available)

10:15am-12:30pm Plenary 3 - MINI-SYMPOSIA 11

Challenges in ICU Management

Co-Chairs: Matthew Legrand and Marlies Ostermann

10:15-10:30 From Fluid Responsiveness to

Fluid Overload: Identifying Fluid

Intolerance

William Beaubien-Souligny

10:30-10:45 RAAS Biomarkers and Emerging

**Evidence in Critical Care** 

Ashish Khanna

10:45-11:00 Health Disparities in the ICU:

What are the Next Steps?

Amira Mohamed

11:00-11:15 **Learning Health Systems:** 

Do They Exist and Can They

Work? – Derek Angus

11:15-11:30 Don't You Forget About Me:

Non-ATN Causes of AKI in the ICU

Mitch Rosner

11:30-11:45 Vascular Access for AKI:

Tunneled or non-Tunneled?

Vandana Niyyar

11:45-12:15 **SPECIAL LECTURE** 

San Diego AKI & CRRT Award

Translating Discoveries to Enhance Management in AKI

**TBD** 

12:15-12:30 Top Abstract Awards

#### 12:30-2:00pm LUNCH SYMPOSIA - (Non-CME)

(Seating is LIMITED, selection made during registration, lunch provided by conference. Please note: At this time, these are the only lunch options provided on Thursday.)

#### T1 Social Determinants of Health (SDoH) and AKI

Despite advances in medical care, racial, ethnic and socioeconomic disparities persist for patients and are increasingly recognized to influence health outcomes. Factors contributing to health disparities are complex and multifactorial and are not well described for patients with AKI. This symposium will discuss the current understanding of the effects of SDoH on the incidence, recognition, management and follow up of patients with AKI and describe approaches for mitigating these factors to improve patient care and outcomes. *Moderators:* Amira Mohamed and Rolando Claure-Del Granado

Inequalities in Healthcare and Effects on Kidney Disease - Samira Bell

Health disparities in Pediatric AKI – Mignon McCullouh

Utilizing Technology to Tackle SDoH – Javier Neyra

#### T2 Seatbelt for the Kidney: Primary Prevention in Different Settings

Although the kidney is remarkably efficient in maintaining homeostasis, it relies on a delicate balance between energy demand and oxygen supply, which varies considerably in different regions of the kidney. Available data indicate that different AKI-inducing events cause anatomically distinct patterns of injury, which are relevant for the refinement of available therapies and the development of novel renoprotective strategies. This symposium will discuss the rationale for and results of novel strategies to protect the kidney in different settings.

Moderators: Vincent Wu and Ron Wald

Drug-induced Kidney Injury – Patrick Murray

Contrast Associated Imaging - Neesh Pannu

Cardiac Surgery - Alex Zarbock

#### 13 - Additional Lunch Session Offered (Non-CME) see page 5 for details

#### **THURSDAY AFTERNOON, MARCH 14**

#### SESSION III: EMERGING CONCEPTS IN AKI AND RRT (CME Available)

_	Plenary 4 - MINI-SYMPOSIA  Novel Strategies in AKI Management	4:15-6:00pm	Plenary 5 - MINI-SYMPOSIA Challenges and Controversies in Renal Support and CRRT
Co-Chairs: 2:00-2:15	Danielle Soranno and Patrick Murray	Co-Chairs:	Kat Gist and Michael Connor
2:15-2:30	Bicarbonate Therapy for AKI. Yes or No? Lui Forni Application for AKI Early	4:15-4:30	To Dialyze or Not: That is the Question? Mitra Nadim
	Detection and Prediction Models in Clinical Practice SeJoong Kim	4:30-4:45	Dynamic Phenotyping for Dialysis Delivery in the ICU Ravindra L Mehta
2:30-2:45	Target Blood Pressure to Prevent AKI: Higher or Normotension? Nattachai Srisawat	4:45-5:00	Leveraging Personal Health Platforms for AKI Followup Rajit Basu
2:45-3:00	The Aging Kidney: An Old Age Problem Michael Joannidis	5:00-5:15	Dialysis in AKI: When is a Good Thing Bad? Kathleen Liu
3:00-3:15	Clinical Decision Support for AKI: Are We There Yet? Neesh Pannu	5:15-5:30	Albumin and Clinical Outcomes in AKI and CRRT Kianoush Kashani
3:15-3:30	<b>Urinary Microscopy to Identify</b>	5:30-6:00	ADQI UPDATE
	Subclinical AKI Rolando Claure-Del Granado	5:30-5:45	ADQI 31: Endpoints for AKI Trials Alex Zarbock and Lui Forni
3:30-3:45	Waste Not Want Not: The Case for Acute Dialysis Ravindra Mehta	5:45-6:00	ADQI 32: Role of Sex and Gender in AKI (Sex <sup>XY</sup> ADQI) Danielle Soranno and
3:45-4:15	Coffee Break		Marlies Ostermann
		6:00	Adjourn - Free Evening



#### FRIDAY MORNING, MARCH 15

7:00am-1:00pm Conference Registration Open

7:00-8:00am MEET THE EXPERT - Breakfast Sessions (CME Available)

(elective sessions, choose one, see pg. 4 for fees/details)

Session 5  $\left(\text{ME5}\right)$  - Deciding who Needs to Start and Stop RRT

Ron Wald and Marlies Ostermann

Session 6 (ME6) - How do I Assess the Volume Status of My Patient? Kianoush Kashani and Peter Pickkers

7:00-8:00am MORNING SYMPOSIA - (CME Available)

(Seating is LIMITED, selection made during registration, coffee served)

Symposium E - Innovations in Caring for Patients with Electrolyte and

**Acid Base Problems** 

Etienne Macedo (Moderator)

Lenar Yessayan and Nuttha Lumertgul (Discussants)

Dysnatremias are commonly encountered in ICU patients and are often difficult to manage. This symposium will cover the pathophysiology of hypo and hypernatremia and discuss the practical issues for management of these disorders with novel agents and describe how RRT can be used for severe disorders.

#### Symposium F - Optimizing Fluid Management in the ICU: Fit for Purpose?

Michael Connor (Moderator)

Andrew Shaw and Ashish Khanna (Discussants)

Fluid administration is an integral component of management, however there is considerable variation in the type and quantity of fluids used and increasing concern that fluid therapy contributes to AKI. This symposium will review the evidence for our current strategy for using crsytalloids, colloids and blood products and provide guidance on best practices to manage patients in different settings.

#### SESSION IV: IMPROVING OUTCOMES IN AKI (CME Available)

8:00-10:30ar	n Plenary 6 - MINI SYMPOSIA	9:15-9:30	What Outcomes Matter to
	Global Burden of AKI		Patients and Their Relatives?
Co-Chairs:	Etienne Macedo and		Sean Bagshaw
	Nattachai Srisawat	9:30-9:45	Does Treating AKI in Low
8:00-8:15	Personalization and		Resourced Regions Matter?
	Standardization of RRT in the		Mignon McCulloch
	ICU: Lessons from Pediatrics	9:45-10:00	Variation in Pediatric CKRT
	David Askenazi		<b>Practices Across the Globe</b>
8:15-8:30	Education in AKI:		Akash Deep
	What's Needed?	10:00-10:15	CRRT Net Initiative:
	Jorge Cerda		<b>Lessons Learned and Applied</b>
8:30-8:45	Long-COVID Manifesting as		Javier Neyra
	Kidney Disease	10:15-10:30	ADQI 33: Obstetric AKI
	Emmanuel Burdmann		Rajasekara Chakravarthi
8:45-9:00	<b>Quality of Life Post AKI</b>	10:30-11:00	Coffee Break
	Marlies Ostermann		
9:00-9:15	Nephrology Consultation in the		
	ICU: Who Benefits?		
	Harin Rhee		

#### FRIDAY MORNING, MARCH 15

#### SESSION V: FUTURE TRENDS IN CRRT AND CRITICAL CARE (CME Available)

11:00am-1:00pm Plenary 7 - MINI SYMPOSIA

Emerging Strategies in AKI and

Extracorporeal Support

Co-Chairs: Vincent Wu and Jorge Cerda

11:00-11:15 Transitions from CRRT to IRRT:

Strategies for Success

Ron Wald

11:15-11:30 Reassessing AKD Care and

**Outcomes: Time to Abandon** 

**Conventional Beliefs** 

Vincent Wu, MD

11:30-12:35 Update from Ongoing and

**Late Breaking Trials** 

8-10 minutes each

1. The RELIEVE-AKI Trial Raghavan Murugan

2. The RECOVER AKI Trial

Javier Neyra

3. Dialyzing Wisely Trial

Oleksa Rewa

4. The HERRIC Registry

Vedran Premuzic

5. The RELAX Trial Christian Nusshag

6. WE-ROCK, the Pediatric RRT

Collaborative

Kat Gist

7. The DIAMOND Study

Jay Koyner

8. The SIN-AKI Study

Vincenzo Cantaluppi

12:35-12:55 Critical Care Nephrology:

Literature Review

Kianoush Kashani

12:55-1:00 Closing Remarks

Ravindra L. Mehta *Chairman* 

1:00pm Conference Adjourns